

Appendix E – Response to Public Comments

Comments were received from:

- (a) The City of Oklahoma City, Public Works Department (OKC)
- (b) Oklahoma Ordnance Works Authority (OOWA)
- (c) Oklahoma Farm Bureau (OFB)
- (d) AES Shady Point, LLC (AES)
- (e) Andrew Jorgensen, resident of Tahlequah, OK
- (f) Ruth Williams, resident of Oklahoma City, OK
- (g) C.K. West, resident of Choctaw, OK
- (h) Douglas Evans, P.E., resident of Grove, OK
- (i) David Ezell, resident of Elgin, OK
- (j) Victoria Gonzalez, resident of Blanchard, OK - Comment received during the public meeting of June 19, 2008.

This key is used in the summary of comments below to identify the commenter. DEQ responses to comments are indicated in *italics*.

1. (OKC) Shell Creek, WBID OK520530000030_00 is listed in Appendix B as not supporting the Primary Body Contact Recreation beneficial use, however a source and cause is not listed in Appendix C for Primary Body Contact Recreation impairment. We request that you clarify this listing.

DEQ Response: Shell Creek (OK520530000030_00) is correctly listed as “Not Supporting” the Primary Body Contact Recreation (PBCR) beneficial use. However, the pathogen causes associated with PBCR are not listed in Appendix C for this waterbody since a TMDL (EPA ID# 33889) has already been completed for these causes (enterococcus, E. coli, and fecal coliform). Shell Creek is not included on the 303(d) list (Appendix C) for impairment by bacteria since the TMDL is already completed. No changes were made as a result of this comment.

2. (OKC) Cow Creek, WBID OK520610010230_00. Currently, this is one large WBID segment. Oklahoma City (OKC) has two (2) monitoring locations on Cow Creek. OKC’s upstream data supports a listing for low dissolved oxygen levels, however, the downstream monitoring location is fully supporting with regard to dissolved oxygen criteria. OKC feels that this listing for dissolved oxygen is not appropriate for the entire (current) stream reach. We request that ODEQ consider adding an additional WBID segment at or near the confluence of Cow Creek Tributary 2 and Cow Creek.

DEQ Response: Cow Creek (OK520610010230_00) has a length of 6.71 miles. DEQ does not believe that splitting this waterbody into two segments is warranted at this time. This request will be reconsidered for the 2010 Integrated Report. No changes were made as a result of this comment.

3. (OKC) Campbell Creek, WBID 520520000230_00 is listed for low dissolved oxygen concentrations, ammonia toxicity, pH and oil and grease. (The comment letter from the City of Oklahoma City included data indicating that no impairments related to ammonia, oil & grease, and pH should be listed for this segment.)

DEQ Response: Use assessments for Campbell Creek (OK520520000230_00) were originally compiled for the 2008 Integrated Report using incorrect GIS data. This error has been corrected. As a result, the causes of Ammonia, Oil & Grease, and pH causes for Campbell Creek have been removed from the 2008 303(d) list. Campbell Creek remains on the 303(d) list for the Dissolved Oxygen cause.

4. (OKC) Airport Heights Creek, WBID 520520000350_00 is listed for low dissolved oxygen concentrations, fecal coliform and oil & grease. OKC has one (1) monitoring location (OKC Site Number 617) on Airport Heights Creek, which is located on SW 15th Street just east of Portland Avenue. The Aesthetics Beneficial Use was found to be Fully Supporting with regard to oil and grease according to OKC’s Five-year Permit Report for the Watershed Characterization Program (April 1, 2007). The following data suggests that during data collection activities at OKC Site Number 617 from July 29, 2003 to July 25, 2005, oil & grease was observed on two (2) of the twenty-two (22) site visits which resulted in a nine (9%) frequency of exceedance. This data would also

suggest that the Fish and Wildlife Propagation, Warm Water Aquatic Community Beneficial Use is also Fully Supported with regard to oil & grease. (Oil & Grease data was included in comment letter)

DEQ Response: Airport Heights Creek (OK520520000350_00) was assessed using incorrect GIS data. This segment has been reassessed using the correct information. Based on the data associated with this waterbody, the causes of Fecal Coliform and Oil & Grease have been removed. The current data also indicates impairment with respect to Dissolved Oxygen and Turbidity. These changes have been made to the 2008 303(d) list.

5. (OKC) Chisholm Creek, WBID 620910040100_00 is listed for Enterococcus and nitrates. OKC is currently monitoring Chisholm Creek at (1) location (OKC Site Number 622) just north of the NW 192nd Street intersection on Western Avenue. This WBID segment is 21 miles long, which ends at the Cottonwood Creek confluence and begins in OKC near NW 100th Street and McKinley Avenue. Our monitoring data, although not nitrate nitrogen independently, but as nitrate plus nitrite nitrogen indicates no violations of Oklahoma Water Quality Standards. According to Appendix G – Numerical Criteria to Protect Beneficial Uses, Table II specifies that Nitrates (as N) limit is 10.0 mg/L. OKC's nitrate plus nitrite (as N) laboratory analysis reports from August 14, 2007 through January 29, 2008 indicate that the concentration range from a minimum of 0.033 mg/L to a maximum of 0.59 mg/L. The table below includes quality assurance sample (duplicate, trip blanks, splits and equipment blanks) and the grab sample reported values. Only the six (6) grab sample results were utilized for the ranges specified above. We submit for your consideration, adding an additional WBID segment in the proximity of North Western and Covell Road (just north of the intersection approx. 1200 feet) near the confluences of the small tributary discharging from the Shore Unnamed Lake 161 and the confluence with the unnamed tributary to Chisholm Creek to provide for more manageable and meaningful WBID segments in Chisholm Creek. (data was included in the comment letter)

DEQ Response: The Chisholm Creek data presented by the City of Oklahoma City was not collected before the April 30, 2007 deadline for inclusion in the 2008 Integrated Report. This data will be used in the assessment of Chisholm Creek for the 2010 Integrated Report. The re-segmentation of Chisholm Creek will also be reviewed for the 2010 Integrated Report. No changes were made as a result of this comment.

6. (OOWA) As a result of comprehensive efforts currently being conducted to mitigate the DO issues in the Grand Neosho River, the inclusion of the dissolved oxygen impairment for the River into Appendix C is premature. GRDA studies including real-time monitoring, flow modification, oxygen injection, etc. were referenced.

DEQ Response: Existing water quality monitoring data demonstrate that this segment of the river is impaired due to low dissolved oxygen. The fact that there may be on-going or proposed studies of this problem is not a valid rationale for not including it on the 303(d) list in Appendix C of the report. If conditions in the river change in the future due to GRDA activities, and that change is reflected in water quality monitoring data that demonstrate the dissolved oxygen criteria are attained, the 303(d) impairment for dissolved oxygen would be removed at that time. No changes were made as a result of this comment.

7. (OOWA) The basis for the inclusion of this stream segment is flawed as a result of selective inclusion of data from the OWRB monitoring program.

DEQ Response: All existing data collected from this segment of the river within the relevant time period was included in the assessment. There was no selective inclusion of data. No changes were made as a result of this comment.

8. (OOWA) Consideration of including the River segment (Neosho River, OK121600010280_00) on the 303(d) list should be deferred until a full year of DO data are available at the end of 2009.

DEQ Response: Any data collected in the future will be considered in future versions of the Integrated Report. See also the response to comment 6 above. No changes were made as a result of this comment.

9. (OOWA) If, as expected, full year data is below 10% then no listing issue is present. In the unlikely event that full year data exceeds the 10% threshold, the decisions regarding corrective action to improve DO conditions

below the Kerr Dam should by then have been completed and implemented. The changed conditions which will result from those steps will then be in place, and any TMDL or monitoring studies that may be appropriate can be conducted at that time in a setting that will not result in modeling error, nor a wasteful use of state resources.

DEQ Response: Although the Use Support Assessment Protocol detailed in 785:46-15-5 for Fish and Wildlife Propagation Support indicates a 10% threshold with respect to the DO criterion, another DO criterion must be met for the Fish and Wildlife Propagation use to be considered “supported”. According to OAC 785:46-15-3(f)(3), “if more than two concentrations of DO in a stream are observed to be below 2 mg/L in any given year, the Fish and Wildlife Propagation beneficial use shall be deemed to be not supported” based on the magnitude of criteria exceedance. Monitoring data from June through August of 2006 indicates that DO concentrations fell below the 2 mg/L criterion on more than 40 occasions. Based on all available data, the Fish and Wildlife Propagation beneficial use for Neosho River segment OK121600010280_00 must be considered to be “not supported” with respect to Dissolved Oxygen. The appropriateness of considering any expected changing of conditions in the river in the TMDL for this segment will be determined when the TMDL is developed. No changes were made as a result of this comment.

10. (OFB) Page 8, paragraph 3. In the list of reports and data that was used to generate this report, it lists Nonpoint Source Pollution Assessment Report (319(h)) (OCC, 1988, 1994), etc... Was this old data used for listing decisions? Is there an explanation somewhere about how these old reports were used?

DEQ Response: The aforementioned reports were used to make listing decisions for previous 303(d) and 305(b) reports. The historical assessment determinations for a waterbody which were made using this data are included in the 2008 Integrated Report only if an insufficient amount of more recent data has been collected for the waterbody. No changes were made as a result of this comment.

11. (OFB) Page 11, Table 6. Bacteria/pathogens are listed in the top four pollutants causing impairment in rivers and streams: Enterococcus, Esherichia coli, and Fecal Coliform. I would appreciate a discussion of the current bacteria criteria in the water quality standards and how this affects the listing of impaired waterbodies. I have attached a letter from Derek Smithee regarding the bacteria criteria issue. OFB would urge the State to consider putting this item on the agenda for discussion for the next water quality standards revision. It is our understanding that Texas is in the process of developing four or five categories of body contact.

DEQ Response: A discussion of the assessment methodology for bacteria used in this report may be found beginning on page 46. The comment regarding the next water quality standards revision was forwarded to the Oklahoma Water Resources Board for consideration. No changes were made as a result of this comment.

12. (OFB) Page 15, paragraph 2. I would suggest the following additions to the existing language: “Other important grain crops for the state include fall and spring oats, barley, rye, sorghum, soybeans, and corn. In addition, pecans, fruits, vegetables, cotton, and timber all constitute a significant source of income for the state.”

DEQ Response: The requested changes have been included in the final version of the 2008 report.

13. (OFB) Page 25, paragraph 5. The Oklahoma Department of Agriculture Food and Forestry has a program where they travel to different regions of the state and encourage farmers to bring in their old chemicals for safe disposal. I will copy this to ODAFF and ask them to provide you with a paragraph explanation of the program for inclusion in the 2008 report. The program is protective of both ground and surface water quality.

DEQ Response: This information has been added to the final version of the 2008 report.

14. (AES) The Benham Companies, LLC (Benham), on behalf of AES Shady Point, LLC (AES), has reviewed the draft report entitled “Water Quality in Oklahoma 2008 Integrated Report” (Draft Report) recently released by the DEQ for public comment. The Report indicates that Stream Segment 220100, Waterbody ID No. 220100010010 is impaired for the beneficial use of Fish and Wildlife Protection – Warm Water Aquatic Community (FWP-WWAC) for the following constituents: copper, turbidity, and lead (Appendix C – 303(d) List of Impaired Waters, page 17 of 90). AES discharges wastewater into this segment of the Poteau River under their existing OPDES Permit. Benham and AES have obtained and reviewed the copper and hardness data collected by the Oklahoma Water Resources Board as well as the Assessment methodology outlined in the Draft Report on pages 38 through 53. Benham and AES believe that the data does not indicate that the FWP-WWAC

use is impaired for copper. Therefore, we propose that the Draft Report be corrected to confirm that the FWP-WWAC beneficial use for the Stream Segment is not impaired due to copper.

DEQ Response: The OWRB data presented by Benham provides 12 Total Copper samples and 6 Dissolved Copper samples between the dates of 4/23/2002 and 7/31/2007. Of these samples, only 9 Total Copper samples and 3 Dissolved Copper samples occurred prior to the April 30, 2007 deadline for inclusion in the 2008 Integrated Report. The 3 Dissolved Copper samples obtained during the collection period for this report are insufficient to meet the minimum number of samples required by the Use Support Assessment Protocols (OAC 785:46). Therefore, the assessment determination had to be made using the Total Copper data. The Total Copper data show two of the samples exceeded the 7.3 µg/L chronic criterion for Copper. The two exceedances cause the chronic screening value tests to be failed. This segment must be considered impaired for the FWP-WWAC beneficial use with respect to Copper. Any additional data collected from this segment will be included in future versions of the Integrated Report. No changes were made as a result of this comment.

15. (Andrew Jorgensen) I did not see anything in the draft report about perchlorate pollution from fireworks. Is the OKDEQ going to ignore the test results from the USEPA report on Lake Wintersmith at Ada OK and the Dartmouth report by the MASSDEP?

DEQ Response: DEQ reviewed the references provided in the comment. The article "Perchlorate Behavior in a Municipal Lake Following Fireworks Displays" contains perchlorate concentration data for Lake Wintersmith (Ada Lake) from 2004 to 2006. While the data do show sharp increase in perchlorate concentration after the fireworks, the numbers are not high enough to list Ada Lake as impaired for the Fish and Wildlife Use with regard to perchlorate. The highest perchlorate concentration reported in the study of Ada Lake was 44.2 µg/L. This value is well below both the acute (6600 µg/L) and chronic (1800 µg/L) criteria for perchlorate listed in Table 2 of Appendix G, Oklahoma Water Quality Standards (OAC 785:45). The Dartmouth report by the Massachusetts Department of Environmental Protection concludes that 11 years of fireworks displays have resulted in perchlorate contamination of soil and ground water in Dartmouth, Massachusetts. The Dartmouth Report has no bearing on the assessment of waterbodies in Oklahoma. No changes were made as a result of this comment.

16. (Andrew Jorgensen) Have you or do you plan to make studies of fireworks pollution in Oklahoma. I am concerned about the Illinois River watershed, especially Town Branch Creek which runs through Tahlequah. As you may know Tahlequah allows unrestricted discharges of consumer fireworks on the Fourth of July. Many people come from other places which restrict fireworks to discharge them. The air is so polluted over the city one cannot see more than 50 feet and last all night before settling into the creek or storm drains. Then the litter is swept away into the drains ending up in Lake Tenkiller. Please test both the air and water the next day. I am sure there are violations of the Clean Air and Clean Water Acts.

DEQ Response: Current monitoring data for Lake Tenkiller shows no impairment of the lake by perchlorate. Town Branch of Tahlequah Creek has not been assessed for the chemical. Lake monitoring and most stream monitoring in Oklahoma is carried out by the Oklahoma Water Resources Board. The request for monitoring the effect of fireworks on water quality has been forwarded to OWRB for future consideration. No changes were made as a result of this comment.

17. (Ruth Williams) My water is very bad to drink and it kills all my plants. What I would like to know does my water come from Lake Hefner or Lake Overholser? And who do I report this to.

DEQ Response: This was referred to the Environmental Complaints and Local Services (ECLS) Division of the DEQ. The ECLS representative conducted an investigation on site. No irregularities were recorded. No changes were made as a result of this comment.

18. (C.K. West) My family and my friends are concerned about our state's water quality! We desire that our water quality be improved. Testing and making everyone aware of conditions, plus new requirements we hope will raise our water quality. One of our biggest concerns is Illinois River water quality. We hope this recreational River can serve a healthy outing for generations to come. Thanks for your work!

DEQ Response: The DEQ shares your concern about Illinois River and the State's water quality. Recent monitoring data shows that two main contaminants of Illinois River are pathogens and phosphorus. An excess of phosphorus may cause algal blooms depleting oxygen in the water and causing fish kills. No changes were made as a result of this comment.

19. (Douglas Evans) ...Nearly 75% of the rivers in the state are being impaired by some form of pollution, according to federal and state benchmarks. The foregoing is a disgrace to our great state...
...Various volunteer groups, government agencies and industries have conducted water testing in many parts of Oklahoma; certainly enough to evaluate a cause and recommend solutions, although much more testing should be continued. There has definitely been municipal plants constructed and or their improvement, but the excess of pollution continues which must be solved for public health reasons as well as, fish and game propagation, and recreation, economic reasons and because it' is a federal law.
...Information is available indicating Great Lakes, the coastal Waters near Washington, D.C., and many other rivers and lakes of the USA have been greatly improved since Clean Water Act became Law.
...Many conditions contribute to the pollution in Oklahoma's waterways & lakes, (natural, animal, industrial, residential, agricultural, commercial, and municipal); the problems will not always be easy to solve but we do have some test data to work with. We must not allow our problems to defeat us.

DEQ Response: We appreciate your concern. The figure 75 % relates to only those waters that were tested by the state. Most of the state's identified 4,064 waters are not monitored for quality. Additionally, some waters are not included in the report at all. There might be more clean waters in the state but DEQ does not have the testing information to say so for certain.

For the first time, Oklahoma can report five streams to be clear of all harmful levels of pollution. The State works on cleaning up waters of the state and continues to implement Clean Water Act programs such as the program called Total Maximum Daily Loads (TMDL). This program develops the plans to restore impaired waters. No changes were made as a result of this comment.

20. (David Ezell) I thought it was interesting that the # 1 source of our water pollution is unknown, while livestock grazing was listed as the second most common source of pollution. Does the DEQ not know where the pollution is coming from or is government and cities a big polluter of our state water and the DEQ will not list this as the source?

DEQ Response: Sources of pollution that could potentially affect rivers and streams are listed in the Report in table 7 for lakes and Table 8 for streams (pages 12 and 13). The sources listed are not actual confirmed sources of the pollution but a listing of possible sources that may have caused the pollution. Explanation on the procedure for determining possible sources of pollution is contained on page 55 of the report. The table lists sources from greatest to least based on the number of stream miles exposed to each potential source of pollution category. Since grazing occurs in more acres of watershed than municipal dischargers, it is higher on the table. Municipal point source discharges and land application sites are 10th and 11th on the table. The table does not necessarily indicate that cattle grazing causes more stream pollution than municipal discharges but rather that more miles of stream are exposed to cattle grazing.

The comments regarding issues with the City of Elgin were referred to the Municipal Enforcement Section of Water Quality Division and to ECLS Division of the DEQ. No changes were made as a result of this comment.

21. (Victoria Gonzalez) My comment to you is, I'm proud of our state for trying – actually trying and I like that we have a report like this. I'm disappointed that there is not many people here. I feel like there's – I do work in the environmental field, that our water quality is going downhill very quickly. And I feel that it is DEQ's obligation to its citizens that we get more stringent with the rules and regulations of the Clean Water Act. So the water has to be our number one priority in the state. And we can see how our agricultural, our development, all of this is failing us because of the pollution of the water, sedimentation, and it affects our drinking water, and we have to protect it. This is the Agency that is supposed to do that. And I get around to enough areas of the state that I'm very disappointed in the decline that's going into it because of tourism. We are afraid to step on anybody's toes because anywhere there's water you have people come, enjoy it and spend their money. But we have to let the people know that this water is precious. And that we should take care of it. And if we have to start slapping fines, especially in our scenic rivers, then we need to do it. If we have to get after development, because they don't want to follow the Clean Water Act, we need to do it. And we need to change our attitude on ODOT –

and they're trying, but there is a lot they can be doing to stop the amount of sediment that goes into our tributaries and creeks, because inevitably it goes to our lakes. We do not have enough funding for this state, not only for the DEQ, EPA, or for the Water Resources Board to do the type of work that they need to do. And I feel like, you know, our Governor needs to take a look at this and they need to have more funding, because it affects all of us. That's my comment.

DEQ Response: Thank you for your support of clean water in Oklahoma. No changes were made as a result of this comment.